

Sequence Listing

<110> Toshikazu Nakamura  
<120> Glycosylation-deficient hepatocyte growth factor  
<130> N13F1456  
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<211> 728  
<212> PRT  
<213> Homo sapience  
<220> Hepatocyte growth factor  
<223>  
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Leu His Leu Leu Leu Pro Ile Ala Ile Pro Tyr Ala Glu Gly Gln  
20 25 30  
Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr  
35 40 45  
Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val  
50 55 60  
Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu  
65 70 75 80  
Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys  
85 90 95  
Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe  
100 105 110  
Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg Asn Cys  
115 120 125  
Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys  
130 135 140  
Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His  
145 150 155 160  
Ser Phe Leu Pro Ser Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr  
165 170 175  
Cys Arg Asn Pro Arg Gly Glu Gly Gly Pro Trp Cys Phe Thr Ser  
180 185 190  
Asn Pro Glu Val Arg Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu  
195 200 205  
Val Glu Cys Met Thr Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp  
210 215 220  
His Thr Glu Ser Gly Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro  
225 230 235 240  
His Arg His Lys Phe Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp  
245 250 255  
Asp Asn Tyr Cys Arg Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr  
260 265 270  
Thr Leu Asp Pro His Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys  
275 280 285  
Ala Asp Asn Thr Met Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu  
290 295 300  
Cys Ile Gln Gly Gln Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile  
305 310 315 320  
Trp Asn Gly Ile Pro Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu  
325 330 335  
His Asp Met Thr Pro Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn  
340 345 350  
Tyr Cys Arg Asn Pro Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr  
355 360 365  
Asp Pro Asn Ile Arg Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp  
370 375 380  
Met Ser His Gly Gln Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met  
385 390 395 400  
Gly Asn Leu Ser Gln Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp  
405 410 415  
Lys Asn Met Glu Asp Leu His Arg His Ile Phe Trp Glu Pro Asp Ala  
420 425 430  
Ser Lys Leu Asn Glu Asn Tyr Cys Arg Asn Pro Asp Asp Ala His  
435 440 445  
Gly Pro Trp Cys Tyr Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys  
450 455 460  
Pro Ile Ser Arg Cys Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu  
465 470 475 480  
Asp His Pro Val Ile Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val  
485 490 495  
Asn Gly Ile Pro Thr Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg

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500	505	510
Tyr Arg Asn Lys His Ile Cys Gly	Gly Ser Leu Ile Lys	Glu Ser Trp
515	520	525
Val Leu Thr Ala Arg Gln Cys	Phe Pro Ser Arg Asp	Leu Lys Asp Tyr
530	535	540
Glu Ala Trp Leu Gly Ile His Asp	Val His Gly Arg	Gly Asp Glu Lys
545	550	555
Cys Lys Gln Val Leu Asn Val Ser	Gln Leu Val Tyr	Gly Pro Glu Gly
565	570	575
Ser Asp Leu Val Leu Met Lys Leu Ala Arg Pro	Ala Val Leu Asp Asp	
580	585	590
Phe Val Ser Thr Ile Asp Leu Pro Asn	Tyr Gly Cys Thr	Ile Pro Glu
595	600	605
Lys Thr Ser Cys Ser Val Tyr	Gly Trp Gly Tyr	Thr Gly Leu Ile Asn
610	615	620
Tyr Asp Gly Leu Leu Arg Val Ala His	Leu Tyr Ile Met	Gly Asn Glu
625	630	635
Lys Cys Ser Gln His His Arg Gly Lys	Val Thr Leu Asn	Glu Ser Glu
645	650	655
Ile Cys Ala Gly Ala Glu Lys Ile Gly	Ser Gly Pro Cys	Glu Gly Asp
660	665	670
Tyr Gly Gly Pro Leu Val Cys Glu	Gln His Lys Met	Arg Met Val Leu
675	680	685
Gly Val Ile Val Pro Gly Arg Gly	Cys Ala Ile Pro	Asn Arg Pro Gly
690	695	700
Ile Phe Val Arg Val Ala Tyr Tyr	Ala Lys Trp Ile His	Lys Ile Ile
705	710	715
Leu Thr Tyr Lys Val Pro Gln Ser		
	725	

<210> 2
<211> 723
<212> PRT
<213> Homo sapience
<220> Hepatocyte growth factor of five amino acids-deleted type
<223>
<400> 2
Met Trp Val Thr Lys Leu Leu Pro Ala Leu Leu Gln His Val Leu
5 10 15
Leu His Leu Leu Leu Pro Ile Ala Ile Pro Tyr Ala Glu Gly Gln
20 25 30
Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr
35 40 45
Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val
50 55 60
Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu
65 70 75 80
Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys
85 90 95
Leu Trp Phe Pro Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe
100 105 110
Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg Asn Cys
115 120 125
Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys
130 135 140
Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His
145 150 155 160
Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr Cys Arg Asn Pro Arg
165 170 175
Gly Glu Glu Gly Pro Trp Cys Phe Thr Ser Asn Pro Glu Val Arg
180 185 190
Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu Val Glu Cys Met Thr
195 200 205
Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp His Thr Glu Ser Gly
210 215 220
Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro His Arg His Lys Phe
225 230 235 240
Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp Asp Asn Tyr Cys Arg
245 250 255
Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr Thr Leu Asp Pro His
260 265 270
Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys Ala Asp Asn Thr Met
275 280 285
Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu Cys Ile Gln Gly Gln
290 295 300

Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile Trp Asn Gly Ile Pro  
 305 310 315 320  
 Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu His Asp Met Thr Pro  
 325 330 335 335  
 Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn Tyr Cys Arg Asn Pro  
 340 345 350 350  
 Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr Asp Pro Asn Ile Arg  
 355 360 365 365  
 Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp Met Ser His Gly Gln  
 370 375 380 380  
 Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met Gly Asn Leu Ser Gln  
 385 390 395 400  
 Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp Lys Asn Met Glu Asp 5  
 405 410 415 415  
 Leu His Arg His Ile Phe Trp Glu Pro Asp Ala Ser Lys Leu Asn Glu  
 420 425 430 430  
 Asn Tyr Cys Arg Asn Pro Asp Asp Asp Ala His Gly Pro Trp Cys Tyr  
 435 440 445 445  
 Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys Pro Ile Ser Arg Cys  
 450 455 460 460  
 Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu Asp His Pro Val Ile  
 465 470 475 480  
 Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val Asn Gly Ile Pro Thr  
 485 490 495 495  
 Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg Tyr Arg Asn Lys His  
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 Ile Cys Gly Gly Ser Leu Ile Lys Glu Ser Trp Val Leu Thr Ala Arg  
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 Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr Glu Ala Trp Leu Gly  
 530 535 540 540  
 Ile His Asp Val His Gly Arg Gly Asp Glu Lys Cys Lys Gln Val Leu  
 545 550 555 560  
 Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly Ser Asp Leu Val Leu  
 565 570 575 575  
 Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp Phe Val Ser Thr Ile  
 580 585 590 590  
 Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu Lys Thr Ser Cys Ser  
 595 600 605 605  
 Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn Tyr Asp Gly Leu Leu  
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 Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu Lys Cys Ser Gln His  
 625 630 635 640  
 His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu Ile Cys Ala Gly Ala  
 645 650 655 655  
 Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp Tyr Gly Gly Pro Leu  
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 Val Cys Glu Gln His Lys Met Arg Met Val Leu Gly Val Ile Val Pro 5  
 675 680 685 685  
 Gly Arg Gly Cys Ala Ile Pro Asn Arg Pro Gly Ile Phe Val Arg Val  
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 Pro Gln Ser 723

<210> 3  
<211> 2172  
<212> DNA  
<213> *Homo sapience*  
<220> Hepatocyte growth factor of five amino acids-deleted type  
<221>

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<212> DNA
<213> Artificial Sequence
<223>
<400> 4
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<211> 41
<212> DNA
<213> Artificial Sequence
<223>
<400> 5
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<211> 38
<212> DNA
<213> Artificial Sequence
<223>
<400> 6
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<211> 38  
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<213> Artificial Sequence  
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<210> 8
<211> 38
<212> DNA
<213> Artificial Sequence
<223>
<400> 8
ggtgataccacacccgtggaaataggtaattttgcaccatcc 38
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